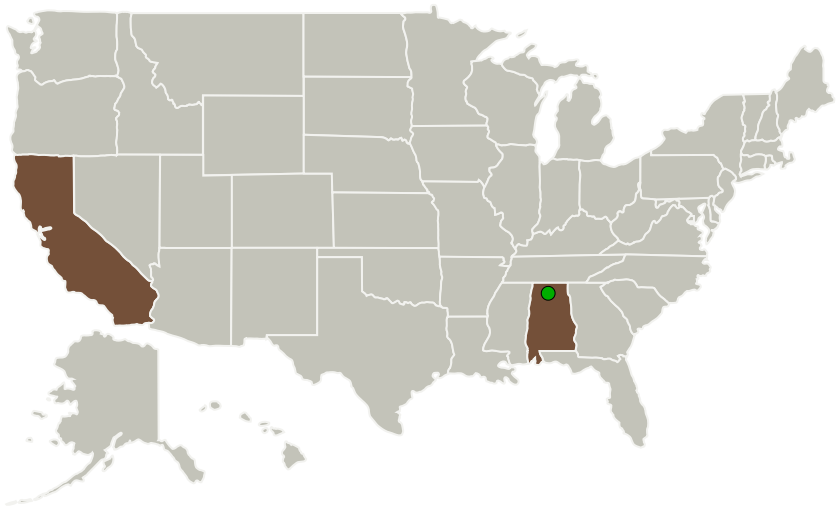
Advanced Mirror Material System, Phase I

Completed Technology Project (2014 - 2014)

Project Introduction

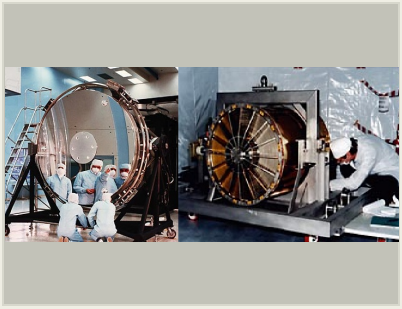
Peregrine will bring together recent laboratory developments and mature the technology so that complete mirror and telescope assemblies can be reliably and robustly produced. This proposed innovation will lower the cost of space mirrors from their current state of the art of $6.4 m/m2 to less than $1.6 m/m2 while maintaining low weight, high stiffness and high performance for x-ray, neutron and UV/optical mirrors.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
The Peregrine Falcon Corporation	Lead Organization	Industry	Pleasanton, California
Marshall Space Flight Center(MSFC)	Supporting Organization	NASA Center	Huntsville, Alabama

Primary U.S. Work Locations	
Alabama	California



Advanced Mirror Material System Project Image

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Project Transitions

June 2014: Project Start

December 2014: Closed out

Closeout Documentation:

- Final Summary Chart*(https://techport.nasa.gov/file/140585)*

Images

Project Image
Advanced Mirror Material System Project Image
(https://techport.nasa.gov/image/131518)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

The Peregrine Falcon Corporation

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

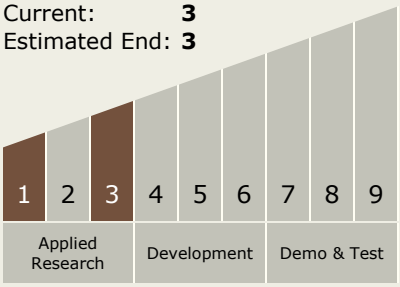
Carlos Torrez

Principal Investigator:

Robert Hardesty

Technology Maturity (TRL)

Start: **1**
Current: **3**
Estimated End: **3**



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Technology Areas

Primary:

- TX08 Sensors and Instruments
  - TX08.2 Observatories
    - TX08.2.1 Mirror Systems

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System